What is claimed is:

1. A method comprising:

    encoding a compressed domain bitstream;

    storing the encoded bitstream;

    retrieving the encoded bitstream after a period of time; and

    decoding the retrieved bitstream.

2. The method of claim 1 wherein the period of time is programmable.

3. The method of claim 1 wherein the period of time depends upon the quality

    of the bit rate of encoding.

4. The method of claim 1 wherein the period of time depends upon the

    complexity of the encoded image.

5. The method of claim 1 wherein the compressed bitstream comprises audio

    data, video data, and audio and video data.

6. The method of claim 1 wherein encoding further comprises maintaining two

    independent time bases for audio and video input.

7. The method of claim 1 wherein encoding further comprises:

encoding an input video stream for a set period of time to generate an

encoded video bitstream;

encoding an input audio stream for a set period of time to generate an

encoded audio bitstream; and

multiplexing the encoded video bitstream and encoded audio bitstream to

generate the compressed bitstream.

8. The method of claim 1 wherein decoding further comprises:

demultiplexing the compressed bitstream into a demultiplexed video

stream and a demultiplexed audio stream;

decoding the demultiplexed video stream into an output video stream; and

decoding the demultiplexed audio stream into an output audio stream.

9. The method of claim 1 wherein retrieving the encoded bitstream beginning

at an access unit pointer.

10. The method of claim 9 further comprising:

setting the position of the access unit pointer via a system start-up

parameter.

11. The method of claim 9 wherein a position of the access unit pointer defines

a specified time delay.

12. A system comprising:

an encoder for encoding a compressed domain bitstream;

a storage medium for storing the encoded bitstream; and

a decoder for retrieving the encoded bitstream after a period of time and

decoding the retrieved bitstream.

13. The system of claim 12 wherein the period of time is programmable.

14. The system of claim 12 wherein the period of time depends upon the quality
of the bit rate of encoding.

15. The system of claim 12 wherein the period of time depends upon the
complexity of the encoded image.

16. The system of claim 12 wherein the compressed bitstream comprises audio
data, video data, and audio and video data.

17. The system of claim 12 wherein the encoder further maintains two
independent time bases for audio and video input.

18. The system of claim 12 wherein the encoder further encodes an input video
stream for a set period of time to generate an encoded video bitstream,
encodes an input audio stream for a set period of time to generate an
encoded audio bitstream, and multiplexes the encoded video bitstream and
encoded audio bitstream to generate the compressed bitstream.

19. The system of claim 12 wherein the decoder further demultiplexes the compressed bitstream into a demultiplexed video stream and a demultiplexed audio stream, decodes the demultiplexed video stream into an output video stream, and decodes the demultiplexed audio stream into an output audio stream.

20. The system of claim 12 wherein the decoder retrieves the encoded bitstream beginning at an access unit pointer.

21. The system of claim 20 wherein a background thread sets the position of the access unit pointer via a system start-up parameter.

22. The system of claim 20 wherein a position of the access unit pointer defines a specified time delay.

23. A system comprising:

    means for encoding a compressed domain bitstream;

    means for storing the encoded bitstream;

    means for retrieving the encoded bitstream after a period of time; and

    means for decoding the retrieved bitstream.

24. A computer readable medium comprising instructions, which when executed on a processor, perform a method for timeshifting the encoding and decoding of a bitstream, the system comprising:

means for encoding a compressed domain bitstream;

means for storing the encoded bitstream;

means for retrieving the encoded bitstream after a period of time; and

means for decoding the retrieved bitstream.